

U.S. Serial No. 09/821,687

Attorney Docket No. 081356-0162

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (withdrawn): An isolated protein comprising an amino acid sequence selected from SEQ. ID NO: 2.

2. (withdrawn): An isolated protein selected from the group consisting of the following (a) and (b):

(a) a protein comprising the amino acid sequence as shown in SEQ ID NO: 4;

or

(b) a protein which comprises the amino acid sequence as shown in SEQ ID NO: 4 having deletion, substitution or addition of one to ten amino acids within the region from position 1 to position 400 and which has RNA binding activity.

3. (cancelled):

4. (currently amended): An isolated nucleic acid molecule encoding a protein comprising the amino acid sequence as shown in SEQ ID NO:4 ~~selected from the group consisting of the following (a) and (b):~~

~~—— (a) a protein comprising the amino acid sequence as shown in SEQ ID NO: 4; and~~

~~—— (b) a protein which comprises the amino acid sequence as shown in SEQ ID NO: 4 having deletion, substitution or addition of one to ten amino acids within the region from position 1 to position 400 and which has RNA binding activity.~~

5. (cancelled):

U.S. Serial No. 09/821,687

Attorney Docket No. 081356-0162

6. (currently amended): An isolated nucleic acid molecule comprising a DNA that comprises a nucleotide sequence spanning from position 154 to position 1836 of SEQ ID NO:3 selected from the group consisting of the following (a) and (b):

~~(a) a DNA comprising a nucleotide sequence spanning from position 154 to position 1836 of SEQ ID NO: 3; and~~

~~(b) a DNA which hybridizes to a DNA comprising a nucleotide sequence spanning from position 154 to position 1836 of SEQ ID NO: 3 and which encodes a protein having RNA binding activity.~~

7. (cancelled):

8. (cancelled):

9. (withdrawn): A method of producing an RNA-binding protein comprising culturing the transformant according to claim 7 and recovering the RNA-binding protein from the resultant culture.

10. (withdrawn): An antibody against the protein according to claim 1.

11. (withdrawn): A pharmaceutical composition for regulating neuronal functions, comprising the protein according to claim 1.

12. (withdrawn): A therapeutic agent for neurological diseases comprising the protein according to claim 1 as an active ingredient.

13. (withdrawn): A pharmaceutical composition for regulating neuronal functions, comprising the gene according to claim 3.

14. (withdrawn): A therapeutic agent for neurological diseases, comprising the gene according to claim 3.

15. (withdrawn): A reagent for detecting Synaptotagmin-binding and yet RNA-binding protein comprising the antibody according to claim 10.

U.S. Serial No. 09/821,687

Attorney Docket No. 081356-0162

16. (withdrawn): A reagent for detecting Synaptotagmin, comprising the protein according to claim 1.

17. (withdrawn): A method of detecting an RNA-binding protein, comprising:

(a) fractionating a sample;

(b) reacting the resultant fractions with the antibody according to claim 10 which has been labeled; and

(c) detecting a signal from the resultant reaction products.

18. (withdrawn): The method according to claim 17, wherein the sample is a lysate or a cellular fraction thereof.

19. (withdrawn): A method of detecting Synaptotagmin, comprising:

(a) fractionating a sample;

(b) reacting the resultant fractions with the protein wherein an isolated protein comprising an amino acid sequence selected from SEQ. ID NO: 2 which has been labeled;

(c) reacting the reaction products obtained in step (b) above with the antibody according to claim 10 which has been labeled; and

(d) detecting a signal from the reaction products obtained in step (c) above.

20. (withdrawn): The method of claim 19, wherein the sample is a lysate or a cellular fraction thereof, or a cell lysate containing a fusion protein composed of Synaptotagmin and glutathione-S-transferase.

21. (currently amended): A recombinant vector comprising the gene nucleic acid molecule according to claim 4.

22. (cancelled):

23. (currently amended): A recombinant vector comprising the gene nucleic acid molecule according to claim 6.

U.S. Serial No. 09/821,687

Attorney Docket No. 081356-0162

24. (withdrawn): An antibody against the protein according to claim 2.
25. (withdrawn): A pharmaceutical composition for regulating neuronal functions, comprising the protein according to claim 2.
26. (withdrawn): A therapeutic agent for neurological diseases comprising the protein according to claim 2 as an active ingredient.
27. (withdrawn): A pharmaceutical composition for regulating neuronal functions, comprising the gene according to claim 4.
28. (withdrawn): A pharmaceutical composition for regulating neuronal functions, comprising the gene according to claim 5.
29. (withdrawn): A pharmaceutical composition for regulating neuronal functions, comprising the gene according to claim 6.
30. (withdrawn): A therapeutic agent for neurological diseases, comprising the gene according to claim 4.
31. (withdrawn): A therapeutic agent for neurological diseases, comprising the gene according to claim 5.
32. (withdrawn): A therapeutic agent for neurological diseases, comprising the gene according to claim 6.
33. (withdrawn): A reagent for detecting Synaptotagmin, comprising the protein according to claim 2.
34. (withdrawn): A reagent for detecting Synaptotagmin, comprising the protein according to claim 10.
35. (withdrawn): A reagent for detecting Synaptotagmin, comprising the antibody according to claim 10.
36. (withdrawn): A method of detecting Synaptotagmin, comprising:

U.S. Serial No. 09/821,687

Attorney Docket No. 081356-0162

(a) fractionating a sample;

(b) reacting the resultant fractions with a protein comprising an amino acid sequence, which has been labeled, selected from the group consisting of SEQ. ID NO: 2, SEQ ID NO: 4, and SEQ ID NO: 4 that has deletion, substitution or addition of one to ten amino acids within the region from position 1 to position 400 and that has RNA binding activity;

(c) reacting the reaction products obtained in step (b) with the antibody according to claim 10 which has been labeled; and

(d) detecting a signal from the reaction products obtained in step (c) above.